Extreme Weather

*Lauren Butler, Matthew Madej*

**Extreme Weather:** severe or unseasonal weather

**Forms of Extreme Weather:** Tornados, Tropical Cyclones, Heat Wave, Microbursts, and a few others.

**Tornado:** A downward spiral of hot at cold colliding.

Tornados effect the environment by destroying buildings and trees. Tornadoes can cause water contamination. This can kill plants and animals. The debris can be very dangerous as it flies through the air reaching speeds as high as 72 mph – 112 mph.

**Cyclones:** a rapidly rotating storm system characterized by the low pressure center, strong winds, and a spiral arrangements of thunder storms that produce heavy rain.

Cyclones form by water heating up the cooling. After this a storm appears. Cyclones cause a lot of damage on the human environment. The strong winds can destroy a house entirely. The debris from the houses might go flying into other homes destroying them as well. Anything not tied down might fly away and never been seen again. When the cyclones form they can destroy ships completely wrecking expensive cargo on board.

**Heat Wave:** a period of hot and humid weather.

Heat waves can cause draughts and kill of crops in the area. Heat Waves also cause heat related illnesses.

**Microburst:** a localized column of sinking air within a thunderstorm.

A microbursts start with the development of a thunderstorm and the water droplets and hail becomes suspended in the upper portion. They then cool rapidly and everything plummets down to the surface. Wind speeds in microbursts can reach up to 100 mph or sometimes even higher. These winds are capable of levelling hundreds of trees and destroying man made structures. A microburst is a form of a severe thunderstorm.

**Earthquakes:** An earthquake is when we perceive the world to be shaking when really it is only shaking near you. An earthquake occurs when 2 tectonic plates collide. After an earthquake hits (depending on where you are) a tsunami can follow soon after. Earthquakes also have a scale to chart their damage and power called the Richter Magnitude Scale.

**Tsunami:** A giant wave caused by an underwater earthquake. A tsunami can cause floods and pushes entire cities aside with ease. It will carry debris higher onto the land and cause destruction to homes and buildings.

**Real Life Events**

**Typhoon Haiyan**: This was the strongest tropical cyclone on record to hit land and it brought winds higher than 195 mph and killed 5,700, in the Philippines. This did hit a couple separate places in Southeast Asia but the Philippines got it the worst.

**Hati Earthquake:** This earthquake had a magnitude of 7.0 and had a depth of 8.1 miles. This rocked Hati and claimed the lives of over 200,000 people and left 2 million people homeless.

**Hurricane Katrina:** This was the deadliest hurricane to hit the Gulf Coast in 2005. It caused about 1 billion U.S. to fix the damage. This was also then 6th most powerful hurricane to hit the U.S.

**Tōhoku Earthquake and Tsunami:** A 9.0 earthquake arrived on the offshore Japan. This was the biggest quake to ever hit Japan and was followed by a tsunami that lead to about 15 million dead or injured and 2,814 people missing. This also called a meltdown in three other reactors in Fukushima nuclear plant, which was the 2nd worst nuclear disaster after Chernobyl.

**Gujarat Earthquake:** This quake hit on January 26, 2001. This quake had a powerful magnitude between 7.6 and 7.7. What made this quake so powerful is that it lasted 2 minutes. It resulted in 20,000 people dead and 167,000 injured with 400,000 homes destroyed.